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UNIVERSITY OF CENTRAL FLORIDA

# Nicholson School of Communication and Media

Maxwell Kuchenreuther  
maxwellk@knights.ucf.edu

University of Central Florida  
Communication MA (Pending), May 2019

Faculty Supervisor: Dr. Deanna Sellnow  
deanna.sellnow@ucf.edu

Additional Advising:

Dr. Timothy Sellnow  
timothy.sellnow@ucf.edu

Dr. Adam Parrish  
adam.parrish@ucf.edu

## The IDEA Model as a Basis for Instructional Risk Message Design in Response to the 2013 PEDv Outbreak

### Introduction

In the spring of 2013, the Porcine Epidemic Diarrhea Virus, or PEDv, raised the need for good biosecurity practices among pork producers in the United States. The implementation of biosecurity among hog farms is not a new practice, however the threat of PEDv and other potential disease threats has piqued a renewed interest in creating effective instructional risk messages for pork producers and other livestock farmers worldwide. Because the nature of a crisis is dependent on the element of surprise, the gravity of the threat, and forces a short response time (Hermann, 1963), a practical application of the life cycle and potential impact of a crisis scenario like PEDv has strengthened a need to educate stakeholder groups about how to (1) internalize a risk scenario; (2) distribute messages effectively to stakeholder groups; (3) explain risk messages effectively and in a manner that is easy for anyone to understand, and (4) instruct at-risk stakeholders on how to implement these risk messages and take appropriate action to prepare/prevent a crisis scenario like PEDv or any other known or unknown disease threat.

This project takes an in-depth look at how the IDEA model can be applied to creating effective instructional risk messages for stakeholders to practice biosecurity best practices and increase their willingness to comply with these practices.



Figure 1. The IDEA Model  
(Sellnow & Sellnow, 2013; 2018).

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### Methodology

Using principles of experiential learning by Kolb (1984) & Dewey (1986), a possible solution for addressing how stakeholders can mitigate the spread of PEDv was realized through the creation of an interactive instructional risk training module that can be delivered individually through computer software, or communally through traditional focus groups and research studies. The training module introduces participants to PEDv, the IDEA model, exemplification, and how the IDEA model can be tailored not only to the crisis of preventing PEDv, but other additional crises in the future as well. The goal of the training module is establishing self-efficacy between the pork producers and their ability to deal with any crisis they may face.

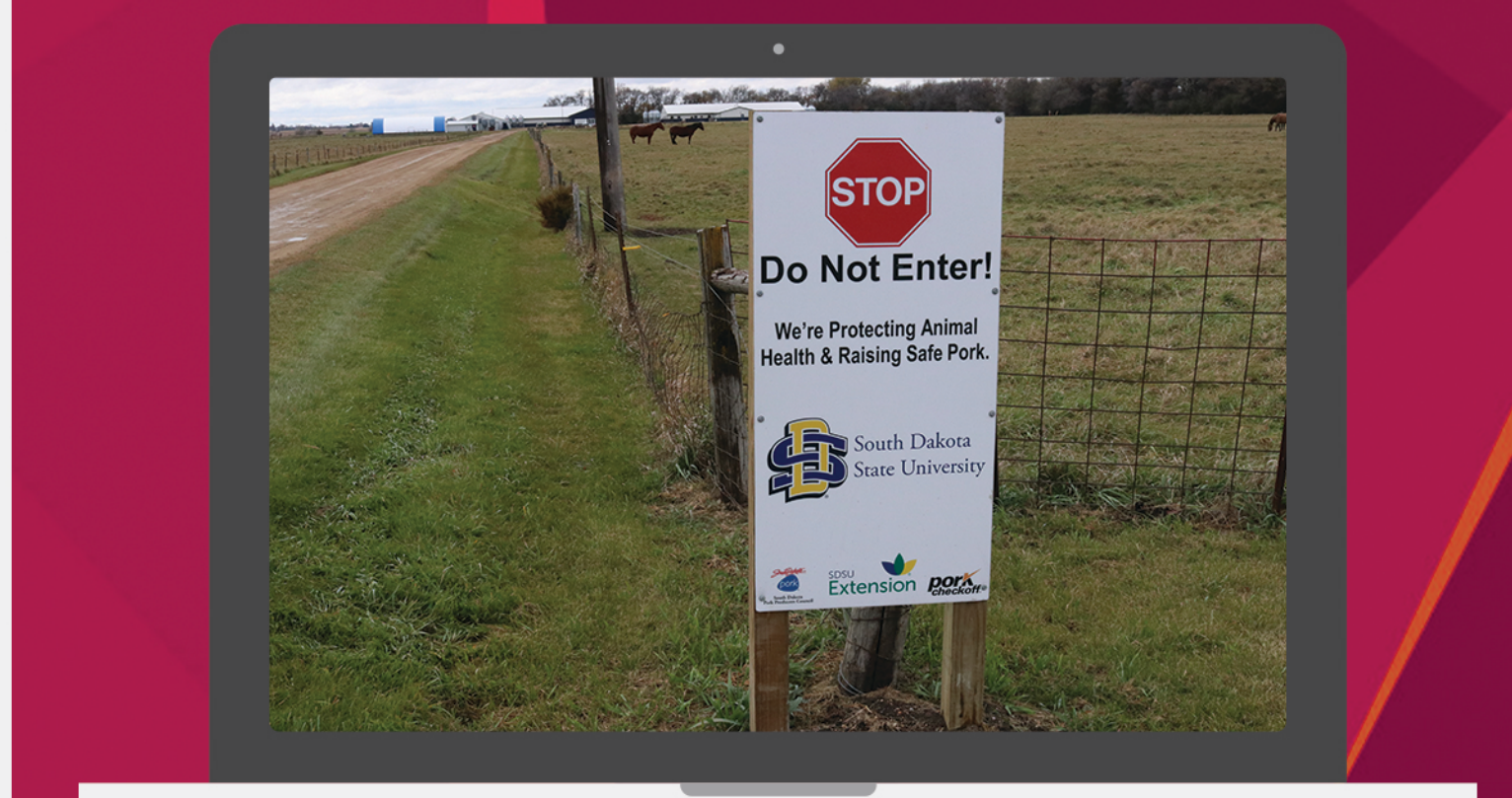
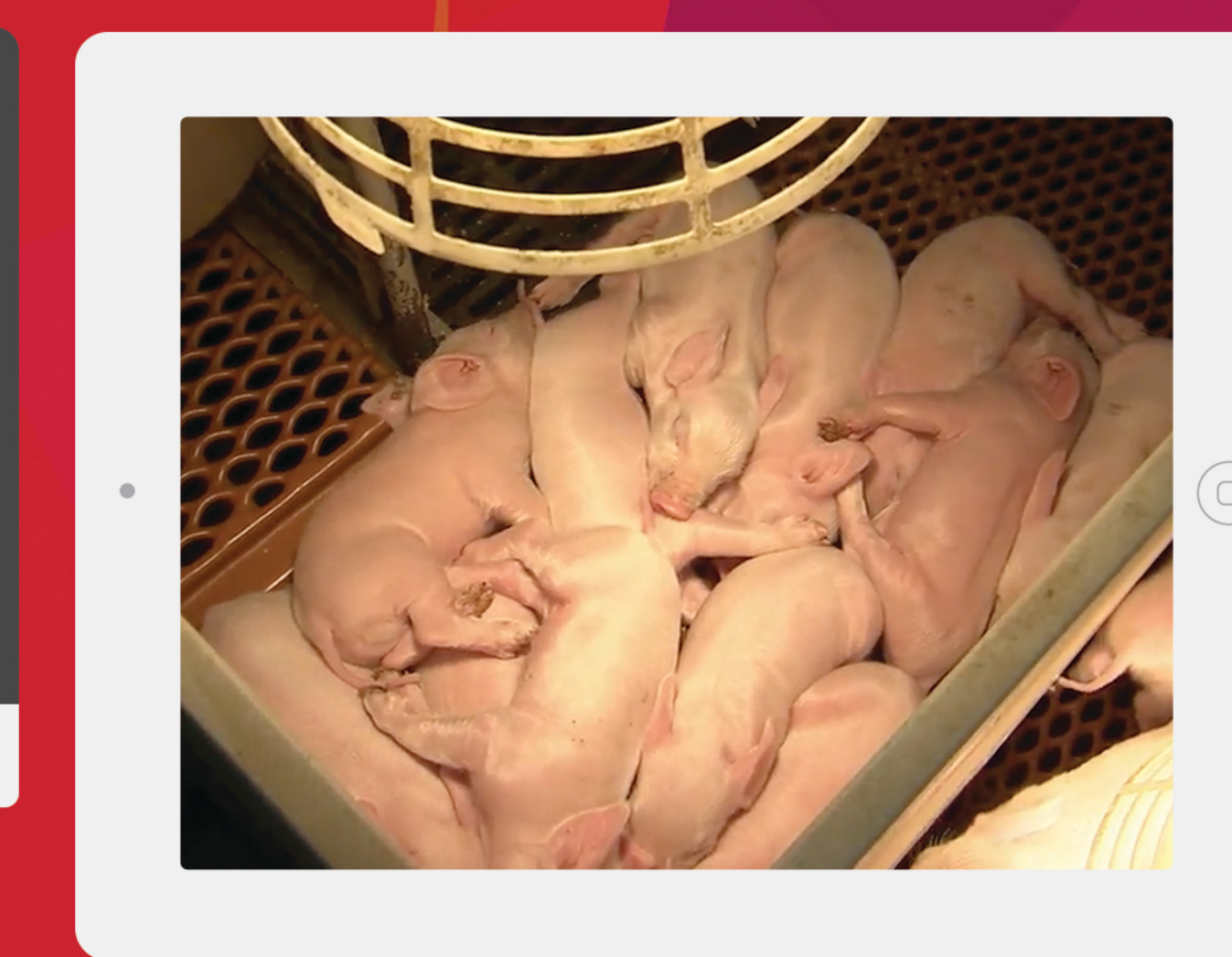


Figure 2. The PEDv Instructional Risk Training Module and possible methods of delivery.

### Challenges, Reflections & Next Steps

The biggest challenge to implementing principles of experiential learning and the IDEA model in a crisis communication situation as a software training module is internalizing the necessity for participants to comply with good biosecurity practices without oversimplifying the gravity of the situation. Establishing self-efficacy in participants is one milestone, but turning what they've learned into practice will be the next obstacle to overcome. How do we measure the success rate of the training module and make sure that pork producers are using the things that they've learned? The delivery of this training module will be left open to experimentation with individual assessments online, as well as delivering the training module in a group setting where participants can discuss their ideas among peers. Additionally, we want to experiment with delivering this module in other languages and in infographic form for speakers of other languages and lower-literacy audiences as well. The IDEA model opens up several viable possibilities for reaching pork producers and internalizing the crisis messages in the best way possible.

#### Selected References

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